6th Grade
Main Rangefinder 3

It is important that you explain and show how you solved … assessment. If you use a calculator, show how you … s

Effective use of symbols and communication skills

❶ Mrs. Smith's class of 24 students …s earned a pizza party. T… pend on pizza and pop.

One topping pizza = $7.50 Six pack pop = $1.25

a. If each pizza has eight slices, and each student wants 3 slices, how many pizzas will they need? *Show or explain how you found your answer.*

24 8)72 x3 72 they will need 9 pizzas so everyone can have three slices

b. If each student wants one can of pop, how many six packs of pop will they need? *Show or explain how you found your answer.*

6)24 4 4 six packs are needed so every student could have a Pop

c. The class decides to buy enough for 3 slices of pizza and one can of pop for each student. What will be the total cost for the pizza party and how much change will Mrs. Smith's class receive from the $75.00? *Show or explain how you found your answer.*

$7.50 x 9 = 67.50 $1.25 x 24 = 30.00 $67.50 + 30.00 = 97.50 Mrs. Smith doesn't have enough money to buy 3 slices and a pop for every student.

d. If there is 1/8 of one pizza left and 5/8 of another pizza left at the end of the … one whole pizza would be remaining? *Show or explain how you found your …*

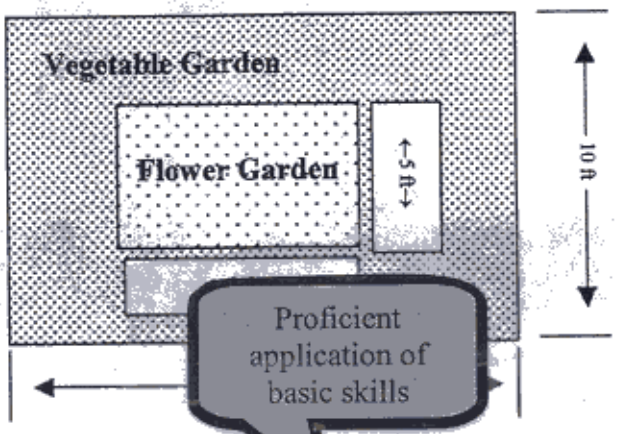
Occasional computational or surface errors

5/8 +1/8 6/8 of the pizza is left

Read problems 2, 3, 4 and 5 on the next few pages. Select three problems to answer. Answer ALL of the parts of the three problems you select to answer. Cross out the one problem that you do not choose to ans

Understanding of situations

❷ Lynn is going to put a flower garden in the middle of a vegetable garden.



Area = length x width

length + width x 2 then add it together = perimeter

Proficient application of basic skills

a. What is the perimeter of the vegetable garden? *Show or explain how you found your answer.*

12ft 10ft 24ft + 44ft is the perimeter of
x2 x2 + 20ft the vegetable garden
24ft 20ft 44ft

b. What is the perimeter of the flower garden? *Show or explain how you found your answer.*

6ft 5ft 12 22ft is the perimeter of the flower
x2 x2 +10 garden.
12ft 10ft 22ft

c. How much **total** fencing will Lynn need to buy to fence around each of the gardens? *Show or explain how you found your* answer.

44ft She needs 66 ft of fencing to go around
+22ft the vetible garden and flower garden.
66 ft

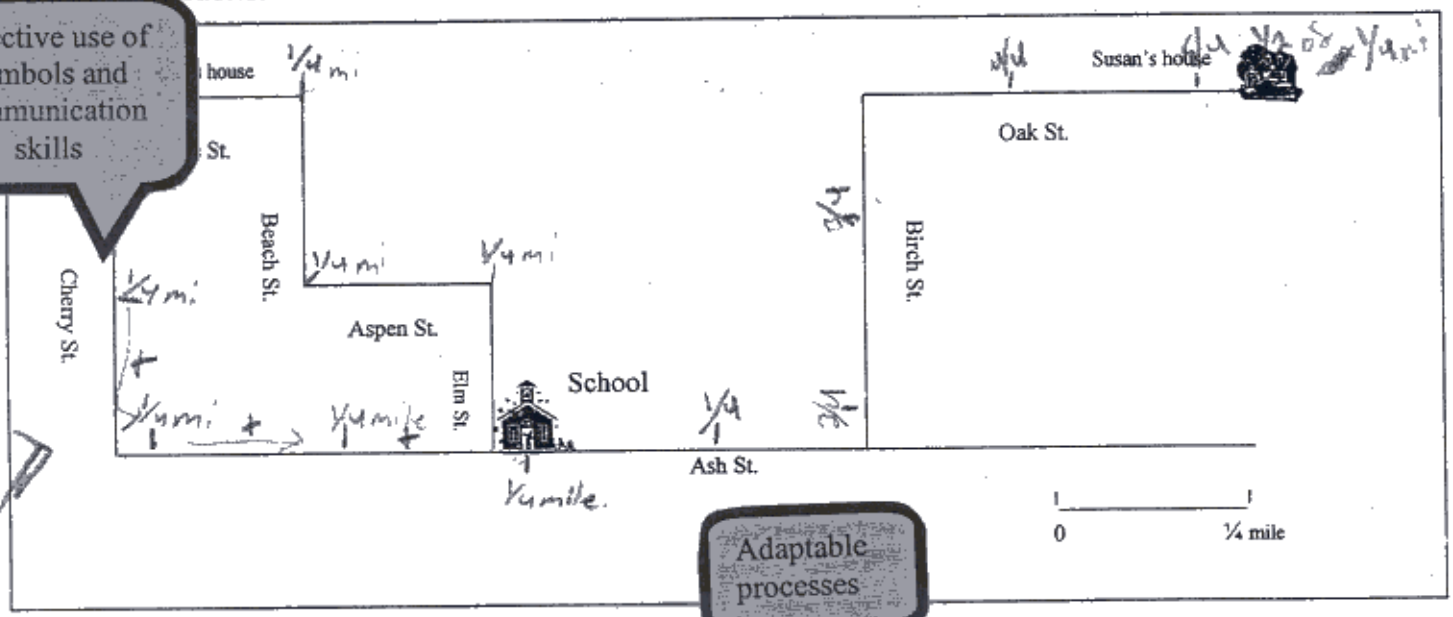
Adequate solutions and processes

d. What is the area of the flower garden and what fraction of the total garden area is thi *explain how you found your answer.*

5 ft 30ft is the area of the flowergarden
x6 ft
30 ft 120ft is the area of the vetetable garden
4
30)120 1/4 is the fraction of the garden

❸ The following is a map of David's and Susan's neighborhood. Use the given scale to answer the questions.

Effective use of symbols and communication skills



Adaptable processes

a. Would it be shorter for David to walk to school using the Cherry Street route or the Maple Street route? *Show or explain how you found your answer.*

They both are the same distance to get to school

Cherry St. = .25 × 4 = 1.00 1 mile to get to school on Cherry St.

Maplest. Route = .25 × 4 = 1.00 1 mile to get to school on maple st. Route

b. About how far do David and Susan each have to walk to school? Who has the shortest walk to school? *Show or explain how you found your answer.*

my house is on the map!

David has to walk 1 mile to school.
Susan has to walk 1 + ⅕ of a mile to get to school
David walks a shorter distance to get to school than Susan.

c. Susan walks ¼ mile in five minutes. School starts at 8:20 AM. What time does she need to leave her house to make it to school on time? *Show or explain how you found your answer.*

She has to walk 1 + ⅕ of a mile to get to school.

¼ mile = 5 mins.
2/4 mile = 10 mins.
¾ mile = 15 mins
to 1 mile = 20 mins.

1 + ¼ = 25 mins.
1 + ⅕ = 27 mins.

Well-defined structure

She needs to leave her house at about 7:50 to make it to school in time and get to her classroom.

❹ Jan's math test scores are 93, 95, 76, 88 and 93.

a. What is her average (mean) score? *Show or explain how you found your answer.*

her average is 89%. $5\overline{)445}$

93
95
76
88
+93
445

b. Using Jan's five test scores, find her median score. *Show or explain how you found your answer.*

76, 88, 93, 93, 96 93 is the median score or the middle # is 93.

c. What is the mode of her scores? *Show or explain how you found your answer.*

93 is the mode because it is the # that shows up the most in the row of digits.

d. Jan really wants a mean score of 90. What is the lowest score she can earn on the next test so that she has a mean score of 90? *Show or explain how you found your answer.*

81 score because the last test lowest score was 76 and you have to add one on until you get the right #

Occasional computational or surface errors

Effective mathematical vocabulary

❺ s of a pattern are:

showing the num the number of sticks required to form them.

Numb	Number of Sticks
2	3

b. How many sticks would be required to make 6 triangles? *Show or explain how you found your answer.*

c. How many sticks would be needed to make 25 triangles? *Show or explain how you found your answer.*

d. Write the rule that explains the relationship between the number of triangles and the number of sticks needed.